# Response to Alameda County Comments For Valero #3823 CUF Claim 5330

Comment 1: (a.) The nearest water supply well is the inactive City of Pleasanton Municipal Well No.7, which is located approximately 250 feet northwest of the Site. (b.) Zone 7 Hopyard Well #9 is located approximately 950 northeast of the Site. (c.) Zone 7 Hopyard Well #6 is located approximately 1,400 feet northwest of the Site. Pumping of approximately 5 million gallons per day was initiated from Hopyard #6 in April 2012 causing local groundwater elevations to drop approximately 10 feet indicating the saturated zones are hydraulically connected. The pumping stopped in December 2012 and the groundwater elevations rebounded approximately 6 feet.

### Response 1:

1a. Although referenced, no record of this well can be found in the California Department of Public Health well permitting database. In addition, no visual confirmation of this well was found in areal or street view photography. However, the subject case meets the Low Threat Closure Policy Groundwater-Specific Criteria as Class 1 which requires supply wells to be a minimum 250 feet away.

1b. Zone 7 Hopyard Well #9 is located approximately 950 northeast of the Site well outside the 250 feet distance required by the Policy.

1c. Zone 7 Hopyard Well #6 is located approximately 1,400 feet northwest of the Site well outside the 250 foot distance required by the Policy. This well is screened at similar depths to the screened interval in monitoring well MW-8. The fact that the shallow and deeper aquifers are in hydraulic connection reinforces the argument that the subject site be closed and the wells on site be properly destroyed in order to protect the deeper producing aquifers. Extending the life of onsite monitoring wells only prolongs the potential conduit for downward migration of the minor residual petroleum hydrocarbons.

#### Comment 2: Affected Groundwater

During the groundwater sampling event in June 2013, MTBE was detected in groundwater from monitoring well MW-8 at concentrations ranging from 13 to 39 micrograms per liter. Monitoring well MW-8 is screened from 118 to 132 feet below ground surface and the City of Pleasanton Well #7 and Hopyard Well #6 are screened in a similar interval.

<u>Response 2</u>: The analytical results of 13 and 39 micrograms are from duplicate samples not an increasing trend just laboratory reporting noise. Again closing the site and properly destroying the monitoring wells will eliminate the potential conduits for further downward migration.

# Comment 3: Plume Stability

The Notice states the remaining "petroleum hydrocarbon constituents are limited, stable, and concentrations are decreasing".

Response 3: The historical groundwater data from monitoring wells demonstrate that fluctuations in groundwater concentrations do vary between times when the remediation system operated and non-operation as would be expected. The responsible party has removed 1,900

cubic yards of affected soil and extracted, conducted vapor extraction and treated 13 million gallons of affected groundwater. The residual petroleum hydrocarbons in the soil and groundwater at the site have reached concentrations below the technical and economical limits of remediation equipment.

## Comment 4: Groundwater Trends

- a.) The Notice includes three graphs of MTBE concentrations in the section entitled, "Groundwater Trends". None of the graphs are valid representations of concentration trends for the Site. The graph for well VR 2 shows MTBE concentrations from December 2008 until October 2012. The groundwater extraction system was operating during this entire time period. Plotting a trend line through this shortened period of time for well VR-2 to represent long-term groundwater concentrations for the Site is misleading.
- b.) The graph for PMW-4 shows one value of 0.5  $\mu$ g/L for MTBE on March 4, 2009 and eight zero values for the following time period.
- c.) As in Comment 4b. the graph uses estimated values and zero's for other points.

### Response 4:

- a.) The final closure summary will have the entire concentration history for VR-2 plotted.
- b.) The data plotted is what was uploaded into GeoTracker and then plotted by GeoTracker. Both 0.5  $\mu$ g/L and zero are well below the water quality objective of 5  $\mu$ g/L.
- c.) The data plotted is what was uploaded into GeoTracker and then plotted by GeoTracker. All data in question are below water quality objectives.

<u>Comment 5</u>: MTBE was not detected in groundwater monitoring well MW-8 at concentrations above water quality criteria until the most recent sampling event in June 2013. The increase in MTBE concentrations may have been caused by the pumping of Hopyard #6 which lowered water levels across the site and created a downward vertical gradient.

Response 5: We agree the downward migration was caused by the pumping of the Hopyard #6 well. Removing the monitoring wells and sealing the vertical conduits at the Site will significantly reduce the likelihood of future vertical migration.

<u>Comment 6</u>: The Notice indicates that the Site meets Scenario 1 of the Groundwater-Specific Criteria in the Low Threat Closure Policy. Please see the table below, which compares site data to the LTCP groundwater criteria. As shown on the table, does not meet any of the LTCP scenarios.

Response 6: The plume length is less than 100 in length, no free product exists and the nearest supply well is greater than 250 feet away, therefore, the Site meets Groundwater-Specific Criteria, Class 1.